



## **SOLAR SYSTEMS PERMIT GUIDELINES**

### **Building / Equipment / Roof Plan Information**

#### ***Required for Photovoltaic & Solar Thermal Systems***

1. Provide a roof plan diagram showing all dimensions and the total area of the roof.
  2. Show roof edges, walls, parapet walls, change of elevations, expansion joints, roof top equipment, etc. on the roof plan diagram
  3. Show the location on the roof where the solar system is to be installed.  
Include the size of the solar system and total area of the proposed system installed on the roof.
  4. Provide the wind uplift zone (per ASCE-7) of the roof, the solar system is to be installed & the wind uplift pressure for that zone.
  5. Provide the Perimeter Width (per ASCE-7) of the roof and /or roof section, the solar system is to be installed
  6. Provide the type of structural roof deck type on the building, the solar system is to be installed
  7. Specify condition of the roof assembly:
    - New roof (tied to a new construction master permit)
    - Re-roof (replacing existing roof assembly)
    - Existing roof (no change to roof assembly)
  8. Specify the type of roof on the structure and the roofing material used for the roof assembly.
  9. Submit roof clearance requirements for the proposed solar system.
  10. Submit a detail of required roof penetration flashings
  11. Provide a Florida Solar Energy Center ( FSEC ) photovoltaic system certification approval form for the proposed solar system
- NOTE: Photovoltaic Laminate Modules require a separate roofing permit for the installation of this product.***
12. Provide completed copy of owner's solar system disclosure form.

## **Structural Design Requirements for Solar Systems**

***Provide signed & sealed drawings & design calculations for the applicable requirements listed below:***

1. Provide documentation and/or verification that the exposed solar panel equipment meets wind load
2. Provide documentation and/or verification the support framing meets both uplift and lateral forces
3. Provide documentation and/ or verification the structure will accommodate additional dead loads
4. Provide design of connections for the wind loads

## **Electrical Design Requirements for Solar Systems**

1. Submit a complete Electrical Diagram:

***Designed in accordance to the NEC Article 690 Solar Photovoltaic Systems, in its entirety.***

2. Submit a floor plan showing location of all electrical equipment
3. Submit load calculations

***NEC 110.3(B) Installation and Use Listed or Labeled equipment shall be installed and used in accordance with any instructions included in the listing or labeling***

***Electrical Engineer must sign and seal plans if:***

1. The system has a value of more than \$50,000
2. The system has an aggregate service of capacity of 600 amps (240 volts) or more for a residential electrical system
3. The system has an aggregate service of capacity of 800 amps (240 volts) or more for a commercial or industrial electrical system

## **Solar Water Heaters**

### ***System Components***

1. Solar water heater: Submit FSEC approval/listing and system reference drawing

2. Solar water heater using a PV powered pump: Provide electrical listing for PV panel and pump
3. Solar swimming pool water heater: Provide manufacturer's selected system installation manual /detail and system specifications
4. Solar swimming pool water heater: Provide FSEC approval/listing and system reference drawing
5. Show water heater storage tank location on the floor plan
6. Show water heater storage tank relief line termination point
7. Show piping layout from solar collector to storage tank

### **General Guidelines**

A. Building Departments shall establish an individual master permit for both Solar Thermal and Solar Electric installations to which applicable subsidiary categories are to be tied. Adding additional categories to the master permit may not require an additional permit obtained by a separate contractor, but will require a separate trade review in every instance.

B. It is established that Certified Solar Contractors may obtain the master permit in either the Solar Thermal or Solar Electric categories. Certified or Registered Plumbing Contractors may obtain the master permit in the Solar Thermal category. Certified or Registered Electrical Contractors may obtain the master permit in the Solar Electric category. Registered Solar Contractors may obtain the master permit in the solar thermal category, restricted to residential installations only. Each of these contractors may perform all work identified in their individual scopes of work including the installation of appurtenances, apparatus, or equipment. However, such contractor shall subcontract all other work which is specified as being the work in the trade of another contractor.

#### C. Permits & Inspections Required:

1. Solar Thermal: - Permits Required: Building, Roofing & Plumbing  
- Inspections Required: Building/Structural/Roofing -Time of Installation & Final Plumbing-Final
2. Solar Electric: - Permits Required: Building, Roofing & Electrical  
- Inspections Required: Building/Structural/Roofing -Time of Installation & Final Electrical- Rough and Final
3. Hybrid Systems (Complete Panel System combined with integral solar water panels):  
- Permits Required: Building, Roofing & Plumbing  
- Inspections Required: Building/Structural/Roofing -Time of Installation & Final



## **Property Owner's Solar System Disclosure Form**

**Master Permit Number:**

**Contractor's Name:**

**Job Address:**

***"The installation of roof mounted photovoltaic or thermal solar support systems typically require roof system penetrations to allow attachment to the structure which may create additional long-term roof system maintenance requirements and/or jeopardize roof system manufacturer's warranties.***

***Roof mounted solar systems generally require removal and reinstallation of solar panels/arrays in order to perform routine roof system maintenance, repair, or replacement."***

***"I have received a copy of the "Solar Systems Permit Guidelines."***

***The owner's signature in the designated space indicates that the above information has been explained to and understood by the property owner.***

***The owner must sign in person at the Town of Miami Lakes Building Department.***

**Owner's Name:**

**Owner's Signature:**

**Date:**

**Contractor's Signature:**

**Date:**